

REMARKS

Applicant respectfully requests reconsideration in view of the foregoing amendments and the remarks hereinbelow.

In the Office Action dated May 26, 2004, Claims 1-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the publication Q. Huang, FOREGROUND/BACKGROUND SEGMENTATION OF COLOR IMAGES BY INTEGRATION OF MULTIPLE CUES (IEEE Pub. No. 0-8186-7310-9/95[1995]), hereinafter Huang with U.S. Patent 6,707,939 to Weinholz.

Reconsideration of the Examiner's rejection of Claims 1-19 under 35 U.S.C. 103(a) as being unpatentable over the combination of Huang with U.S. Patent 6,707,939 to Weinholz is respectfully requested.

To begin, the Examiner states in the Office Action that Huang "discloses a method for clustering the images, once a feature is extracted from the segmented images, and depending upon the similarities of the segments getting the foreground and background." Applicant responds, most respectfully, that this statement paints with too broad a brush stroke. More particularly, the term "clustering" has two fundamentally and patentably distinct meanings between the algorithm of Huang and the method recited in Claim 1 and supported by the Specification.

In Huang, the term "clustering" refers to the function of a clustering algorithm that operates to "segment the input image into a initial set of regions with similar colors," (Huang, Page 246, Col. 2, Lines 4-6). Clustering occurs on a per image or single image basis in a process which "produces homogeneous regions in which pixels that have similar colors are grouped into a single cluster" (Page 247, Col. 1, Lines 14-16). The process described in Huang has to do with the segmentation of a single digital image, not a set or group of images, (Page 247, Col. 1, Lines 14-16). Although Huang states that "the algorithm is suitable for a class of images . . . typical of museum and retail catalog images " (Page 248, Col. 2, Line 1), still the process is performed on and completed with a single digital image. Thus, if a single digital image is of the class of images typical of museum and retail catalog images, then Huang may have beneficial application.

In essence, therefore, the process of Huang has to do with

achieving a desired foreground and background segmentation of a single digital image. As a result and in contradiction to the Examiner's statement that Huang (and Weinholz) "are solving [a] similar problem of clustering the images," Huang clusters "homogenous regions in which pixels ... have similar colors," within a single digital image. Huang has nothing to do with clustering or grouping of multiple digital images.

With a completely different meaning, the method of the present invention uses the term "clustering" in reference to "an event clustering method *for clustering images comprising similar events into same event image groups from a group of images* [emphasis added], ultimately for the purpose of "delimiting a set of event clusters . . . of same event image groups . . . comprising images pertaining to a set of same events." The Specification provides a variety of novel processes for achieving the desired foreground and background segmentation by which the present invention achieve the event clustering method.

Claim 1, for example, recites "segmenting each image within the group of images into a plurality of image regions," which the Specification supports on Pages 7, Lines 1-28, and elsewhere, according to different region characteristics. Claim 7, on the other hand, recites "dividing each image into a plurality of blocks . . . then utilizing a block-by-block comparison to segment each block-based image into a plurality of regions." Figure 3 and Page 8, Lines 13-28, inter alia, provide support for this approach.

There may be alternative methods for achieving usable foreground and background segmentation that the process of the present invention may use. One such approach for achieving the desired foreground and background segmentation that the present invention uses may, in fact, be the process of Huang. However, the process of Huang for "producing homogeneous regions in which pixels that have similar colors are grouped into a single cluster," is wholly and patentably distinct from the method of the present invention for "clustering images comprising similar events into same event image groups."

Claim 1 has been amended to more clearly recite the present invention and not to overcome the reference to either Huang or Weinholz, or a combination thereof. As such, Claim 1 is patentably distinct from the invention disclosed in Huang for the reasons here provided.

Weinholz has to do with “a method for compressing image data of a digitally produced or stored image to a reduced data set,” (Weinholz, Col. 1, Lines 13-15), and, like Huang, has nothing to do with “clustering images comprising similar events into same event image groups,” as recited in Claim 1. The combination of Huang and Weinholz, therefore, has little to do with the present invention. Accordingly, Claim 1 is patentably distinct from the invention disclosed Huang in combination with Weinholz.

Claims 2-6 depend from Claim 1. Applicant has already addressed the novel aspects that overcome the rejection of Claim 1, and hence the reasons for patentability thereof. It is , thus, respectfully submitted that Claims 2-6 are likewise patentable.

Claim 7, as amended, also recites an “event clustering method using foreground and background segmentation for clustering images from a group of images into for clustering images comprising similar events similar events into same event image groups.” Claim 7 has been amended to more clearly recite the present invention and not to overcome the reference to either Huang or Weinholz, or a combination thereof. Applicant has addressed the novel aspects relating to the present event clustering method in overcoming the rejection of Claim 1, and hence the reasons for patentability thereof. Based on these reasons, it is , thus, respectfully submitted that Claim 7 is likewise patentable.

Claims 8-10 depend from Claim 7. Applicant has already addressed the novel aspects that overcome the rejection of Claim 7, and hence the reasons for patentability thereof. It is , thus, respectfully submitted that Claims 8-10 are likewise patentable.

Claim 11, as amended, recites an “event clustering method using foreground and background segmentation for clustering images from a group of images into similar events.” Claim 11 has been amended to more clearly recite the present invention and not to overcome the reference to either Huang or Weinholz, or a combination thereof. Applicant has addressed the novel aspects relating to the present event clustering method in overcoming the rejection of Claim 1, and hence the reasons for patentability thereof. Based on these reasons, it is , thus, respectfully submitted that Claim 11 is likewise patentable.

Claims 12-13 depend from Claim 11. Applicant has already addressed the novel aspects that overcome the rejection of Claim 11, and hence

the reasons for patentability thereof. It is , thus, respectfully submitted that Claims 12-13 are likewise patentable.

Claim 14 also recites a “method for clustering a sequence of images into events based on similarities between the images.” Claim 14 has been amended to more clearly recite the present invention and not to overcome the reference to either Huang or Weinholz, or a combination thereof. Applicant has addressed the novel aspects relating to the present event clustering method in overcoming the rejection of Claim 1, and hence the reasons for patentability thereof. Based on these reasons, it is , thus, respectfully submitted that Claim 14 is likewise patentable.

Claim 15 depends from Claim 14. Applicant has already addressed the novel aspects that overcome the rejection of Claim 14, and hence the reasons for patentability thereof. It is , thus, respectfully submitted that Claim 15 is likewise patentable.

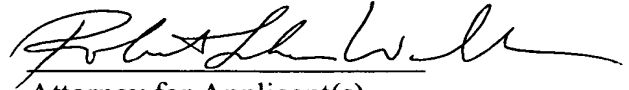
Claim 16 has been cancelled.

Claim 17, as amended, recites a “system using foreground and background segmentation for clustering images from a group of images into a plurality of similar event image groups.” Claim 17 has been amended to more clearly recite the present invention and not to overcome the reference to either Huang or Weinholz, or a combination thereof. Applicant has addressed the novel aspects relating to the present event clustering method in overcoming the rejection of Claim 1, and hence the reasons for patentability thereof. Based on these reasons, it is , thus, respectfully submitted that Claim 17 is likewise patentable.

Claims 18 and 19 depend from Claim 17. Applicant has already addressed the novel aspects that overcome the rejection of Claim 17, and hence the reasons for patentability thereof. It is , thus, respectfully submitted that Claims 18 and 19 are likewise patentable.

It is respectfully submitted, therefore, that in view of the above amendments and remarks, that this application is now in condition for allowance, prompt notice of which is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert Luke Walker", written over a horizontal line.

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